LG

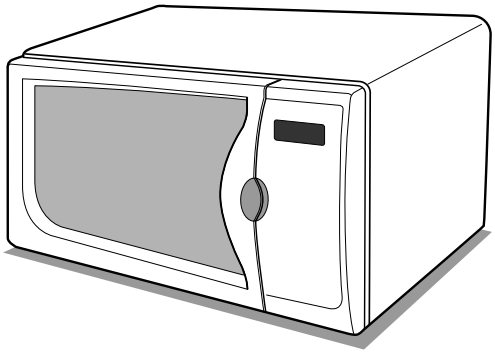
MICROWAVE/GRILL CONVECTION OVEN

SERVICE MANUAL

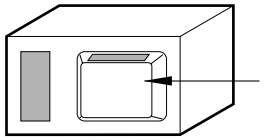
MODEL : MC-804AR

CAUTION

BEFORE SERVICING THE UNIT, READ THE SAFETY PRECAUTIONS IN THIS MANUAL.

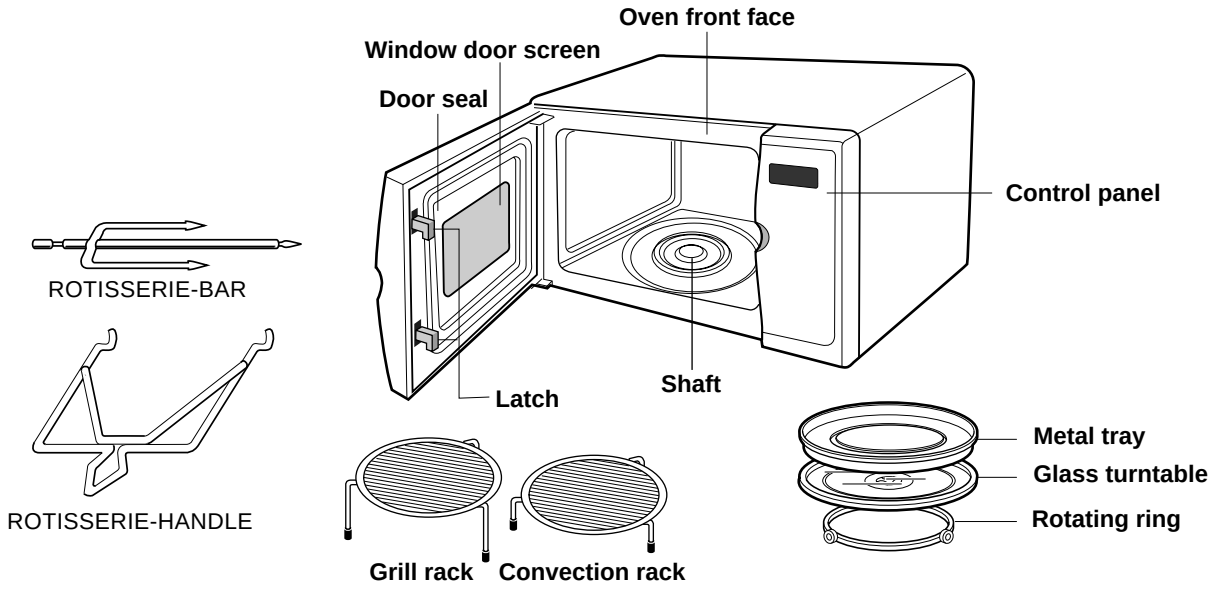


SPECIFICATIONS

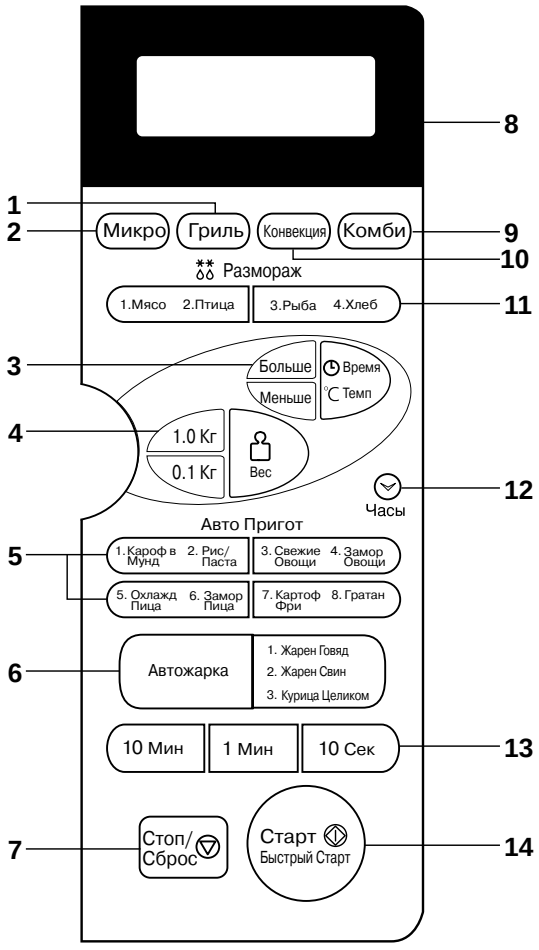
ITEM	DESCRIPTION
MODEL	**MC-804AR**
Power Requirement	230V AC50Hz Single phase, 3 wire grounded Microwave 1,350W Grill 1,250W Convection 1,350W (MAX. 2,550W) Combination 2,650W
Power Output	850W full microwave power(IEC705)
Microwave Frequency	2,450MHz
Magnetron	2M214 - 39F, 2M254J, 2M218J
Timer	99min. 50sec.
Outside Dimensions	530(W) X 322 X 500mm
Cavity Dimensions	348(W) X 232 X 374mm
Net Weight	23.0kg
Shipping weight	25.5kg
Control Complement	Microwave Power for Variable Cooking Power level HIGH.....Full power throughout the cooking time(100%) MED-HIGH .....approx. 80% of Full power MEDIUM .....approx. 60% of Full power DEFROST .....approx. 40% of Full power LOW .....approx. 20% of Full power • Convection - Max. 250°C • Grill • Combination
Name plate Location	 **Back Side**
Accessories	Owner's manual Rotating ring Grill rack Rotisserie-Bar Rotisserie-Handle Glass tray Convection rack Metal tray
This microwave oven is designed for household use only. It is not recommended for commercial purpose.	

OPERATING INSTRUCTIONS

Features



Control Panel

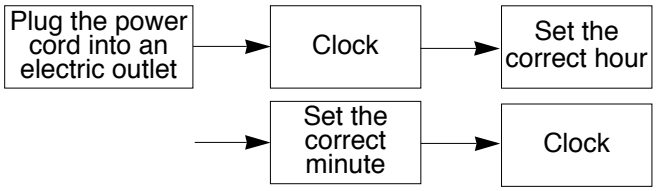


1. Grill: To select grill cooking.
2. MICRO POWER: To select micro power cooking and cooking power levels.
3. MORE/LESS: To select convection temperature, and change auto cook time and auto reheat time.
4. WEIGHT: To set weight of food auto weight defrost.
5. AUTO COOK: To select auto cook.
6. AUTO ROAST
7. STOP/CLEAR, CHILD LOCK: Stops the oven and clear all entries except the time of day.
8. DISPLAY WINDOW: Used to show Time of day, Cooking of day, Cooking power level, Cooking category.
9. COMBINATION: To select combination cooking.
10. CONVECTION: To select convection cooking.
11. AUTO WEIGHT DEFROST: To select auto weight defrost.
12. CLOCK: To set the time of day.
13. TIME: To set cooking times.
14. START/QUICK START: To quickly set the cooking time directly.

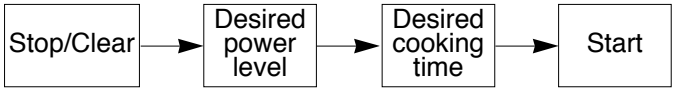
Operating Sequence

The following is a description of component functions during oven operation.

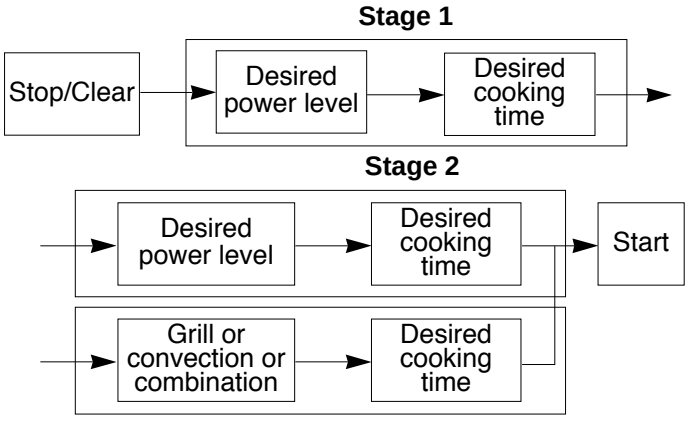
1. Setting the clock



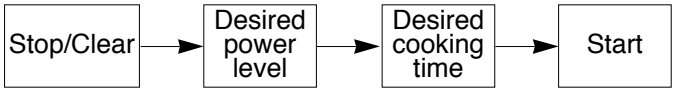
2. Cooking(Microwave power)



3. Multi stage cooking

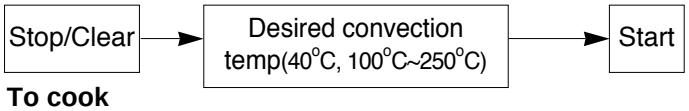


4. Grill cooking

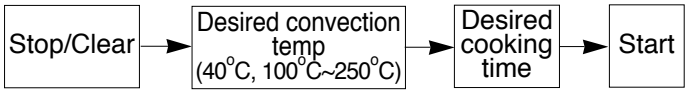


5. Convection cooking

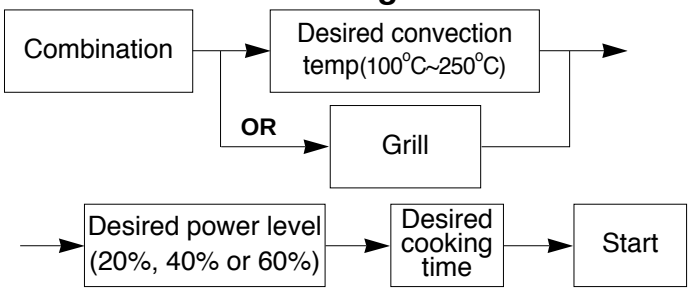
To pre-heat



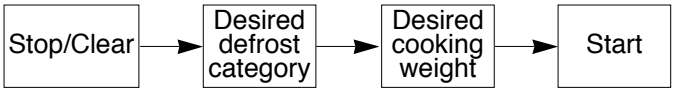
To cook



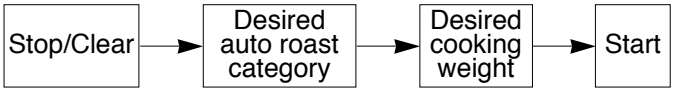
6. Combination cooking



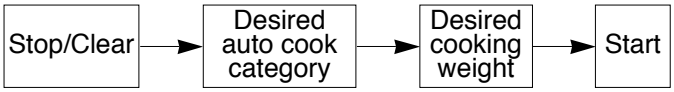
7. Auto weight defrost



8. Auto roast



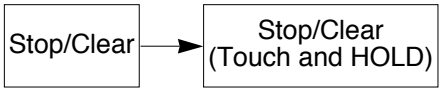
9. Auto cook



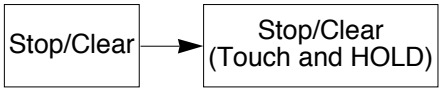
10. Child lock

This oven has a CHILD LOCK feature.

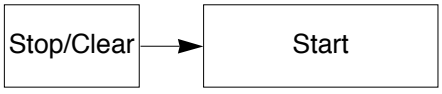
To Set CHILD LOCK



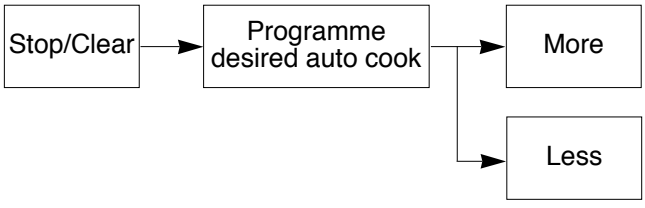
To Cancel CHILD LOCK



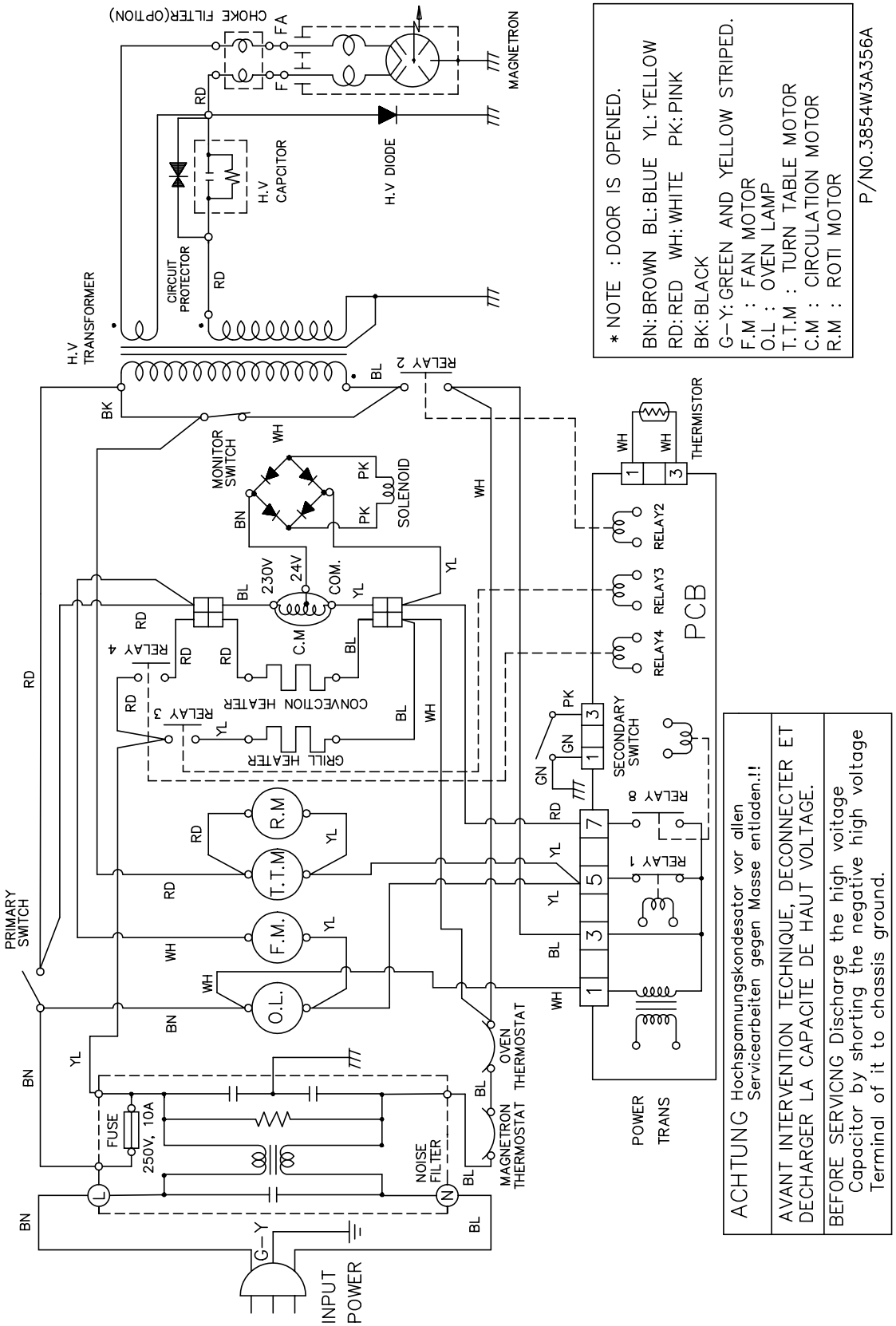
11. Quick start



12. More and Less



SCHEMATIC DIAGRAM

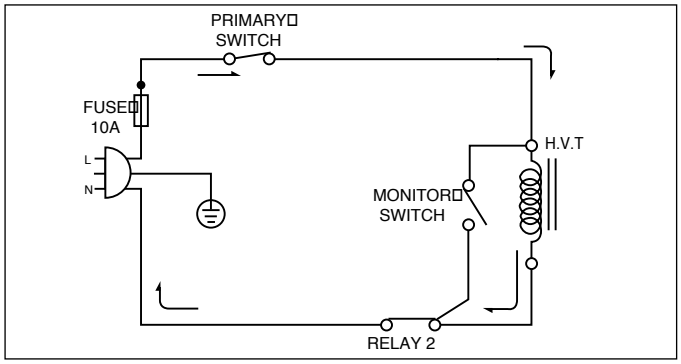


Circuit Description

- As the door is closed, the contact of MONITOR SWITCH opens. This switch creates the short circuit to blow 10 A fuse during operation under abnormal condition.(ie, should the contacts of primary fail to open the circuit)
- The latches are secured by latch board. The oven light turns on while the oven is in operation.

WHEN COOKING POWER LEVEL AND COOKING TIME ARE SET

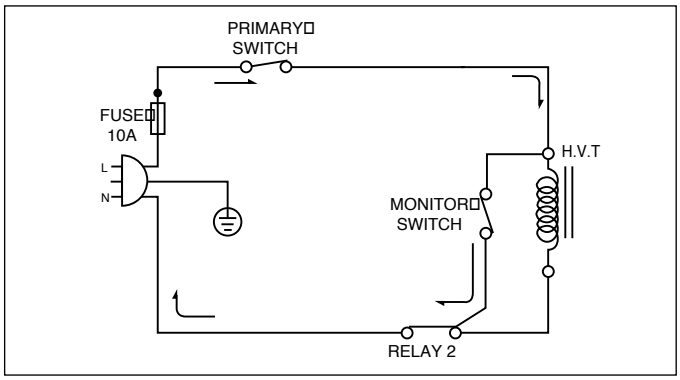
- The contacts of the primary switch and the secondary switch close the circuit.
- 230V A.C. is applied to the high voltage transformer through power control switch as shown by the solid line.
- Turntable and circulation motor rotate.



- The fan motor rotates and cools the magnetron by blowing the air (coming from the intake on the backplate) over the magnetron.
- The air is also directed into the oven to exhaust the vapor in the oven through the base plate and back plate.
- 3.5V A.C. is generated from the filament winding of the high voltage transformer. This 3.5V is applied to the magnetron to heat the magnetron filament through two noise preventing choke coils. A high voltage of approximately 2100V A.C. is generated in the secondary of the high voltage transformer which is increased by the action of the diode and charging of the high voltage capacitor. The negative D.C. voltage is then applied to the filament of the magnetron.

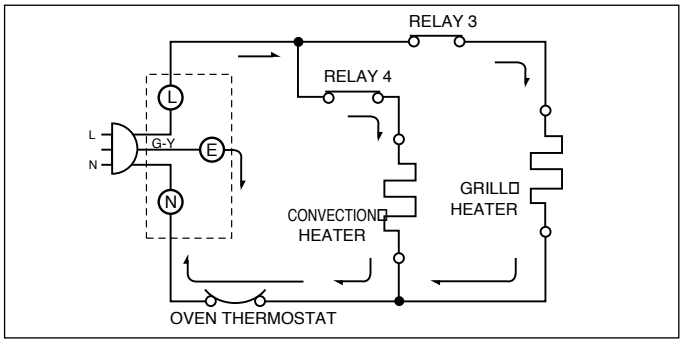
WHEN THE DOOR IS OPEN DURING COOKING

- Both primary switch and secondary switch open to cut off the primary winding voltage to the high voltage transformer to stop microwave oscillation.
- Turntable and fan motor stop.
- As the door is opened, if the contact of primary switch and relay 2 and/or secondary switch fail to open, the 10A fuse opens due to the large current surge caused by the monitor switch activation which in turn stops magnetron, oscillation.



WHEN TOUCHING THE START KEY WITH THE CONVECTION/GRILL COOKING FUNCTION SELECTED.

- The contacts of the primary switch and the secondary switch close the circuit.
- 230V A.C. is applied to the grill heater through grill thermostat as shown by the solid line.



- Turntable rotate.
- The fan motor and circulation motor rotate.
- The air is also directed into the oven to exhaust the vapor in the oven through the base plate and back plate.